

Abstract

SHAPING TOOL WITH STRUCTURED SURFACE FOR CREATING STRUCTURES  
ON GLASS, AND ITS USE IN STRUCTURING CHANNEL PLATES

In the field of glasses with optical functions, glasses with a specific precise surface structuring are required, for instance in display screens of the new flat screen generation, or so-called channel plates.

While avoiding the disadvantages of the screen printing technique employed until now, the invention provides a shaping tool (1) with a structured surface for creating structures on glass (2) which in an economical way makes it possible to form high-precision microstructures by local heating of the region of glass to be structured. The fact that the invention has a rolling cylinder (3) with a metal hollow cylinder (7) and a shaping sheet (8) secured in surface contact to it, as well as a continuous shaft (5) for continuously driving the rolling cylinder (3) via drivers (4). Between the shaft (5) and the hollow cylinder (7), an electric heater is disposed in electrically insulated fashion.

(Fig. 1)